

## REMARKS

This Response is submitted in answer to the Office Action dated July 15, 2008, having a shortened three month period set to expire October 15, 2008.

### I. CLAIM REJECTIONS UNDER 35 U.S.C. § 102

In paragraph 3 of the present Office Action, Claims 1-9, 11-16 and 18-19 are rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 7,047,457 to *Black et al. (Black)*. That rejection is respectfully traversed, and favorable reconsideration of the claims is requested.

#### A. Claim 1

Exemplary Claim 1 is not rendered unpatentable by *Black* because that reference does not identically disclose the “test advisor” recited in Claim 1 as follows:

... a test advisor configured to detect a communication problem based upon the BER and the at least one jitter characteristic and to output a first recommendation regarding correction of the communication problem in response to determining a first combination of the BER and the at least one jitter characteristic and further configured to output a different second recommendation regarding correction of the communication problem in response to determining a different second combination of the BER and the at least one jitter characteristic.

In paragraph 3 of the present Office Action, the Examiner cites control module 35 depicted in *Black*’s Figure 2 as teaching the claimed “test advisor” and further cites the adjustments to the receive settings 76 of the multi-gigabit transceiver as described at col. 5, lines 29-44 as teaching “output[ting] a first recommendation regarding correction of the communication problem.”

Applicant respectfully traverses the Examiner’s position because *Black* does not identically disclose the “test advisor” recited in exemplary Claim 1 as required to support a rejection under 35 U.S.C. § 102. Specifically, *Black* does not identically disclose that control module 35 is “configured to detect a communication problem based upon the BER and the at least one jitter characteristic” and “to output a first recommendation regarding correction of the communication problem in response to determining a first combination of the BER and the at least one jitter characteristic and further

configured to output a different second recommendation regarding correction of the communication problem in response to determining a different second combination of the BER and the at least one jitter characteristic,” as recited in exemplary Claim 1. Instead, *Black* discloses:

The control module 35 determines the bit error rate, via the BER module 37, of the output test signal 72 and may further determine the eye opening, via the EYE module 39, of the output test signal 72 to establish a performance characteristic benchmark.  
....

Having established benchmark measurements, the control module degrades a performance aspect of the multi-gigabit transceiver to produce a varied multi-gigabit transceiver. [col. 5, lines 16-31, emphasis supplied]

Thus, *Black* discloses a two-step process in which a base performance characteristic benchmark of a transceiver is measured and, if the performance fails to attain the selected benchmark, then the transceiver performance is *degraded* to facilitate testing at a lower benchmark of performance (see also, col. 7, lines 3-16.) *Black* does not disclose a test advisor suitable to operate in a feedback loop beginning with the detection of a communication problem and concluding with the output of a recommendation regarding correction of the communication problem as claimed.

Because *Black* does not identically disclose the claimed “test advisor,” Applicant respectfully submits that the rejection of exemplary Claim 1 and similar independent Claims 11 and 18 under 35 U.S.C. § 102 is overcome. In addition, the foregoing remarks overcome the rejection of dependent Claims 2-10, 12-17 and 19-20, which depend from Claims 1, 11 and 18, respectively, and accordingly include the features of their respective underlying independent claims.

#### **B. Claim 4**

*Black* also does not render Claim 4 unpatentable under 35 U.S.C. § 102 because *Black* does not disclose “the first recommendation of the test advisor indicates at least one additional test to be performed when the BER exceeds a predetermined threshold and each of the at least one jitter characteristics is acceptable.” With reference to Claim 4, pages 4-5 of the present Office Action cite col. 6, lines 8-19 of *Black*, which state:

When the level of signal integrity does not provide the desired performance margin, the control module 35 adjusts a programmable operational setting of the multi-gigabit transceiver (e.g., the receive settings 76, which includes, but is not limited to, equalization settings, amplification settings, and/or adjusting the sampling point). With the operational setting adjusted, the testing is repeated to determine whether the MGT now provides the desired performance margin. If the MGT still does not provide the desired performance margin, it may be deemed to have failed testing and discarded or labeled as a reduced operational part (e.g., lower data rates, higher signal to noise ratio requirements, etc.).

As should be apparent, this passage does not disclose a test that is to be performed “when the BER exceeds a predetermined threshold and each of the at least one jitter characteristics is acceptable” as claimed. Instead, the cited passage of *Black* merely discloses repeating testing when operational settings are adjusted.

Because *Black* does not identically disclose each feature of Claim 4, the rejection of Claim 4 and its dependent Claim 5 under 35 U.S.C. § 102 is overcome. The foregoing remarks also overcome the rejection of similar Claim 12.

### **C. Claim 6**

*Black* also does not render Claim 6 unpatentable under 35 U.S.C. § 102 because *Black* does not disclose “the second recommendation of the test advisor indicates a modification to a characteristic of the CDR circuit to be made when the BER exceeds a predetermined threshold and at least one of the jitter characteristics exceeds a specified threshold.” With reference to Claim 6, pages 4-5 of the present Office Action again cite col. 6, lines 8-19 of *Black*, which is reproduced above.

As should be apparent, this passage does not disclose a test that is to be performed “when the BER exceeds a predetermined threshold and at least one of the jitter characteristics exceeds a specified threshold” as claimed. Instead, the cited passage of *Black* merely discloses repeating testing when operational settings are adjusted.

Because *Black* does not identically disclose each feature of Claim 6, the rejection of Claim 6 and its dependent Claims 7-8 under 35 U.S.C. § 102 is overcome. The foregoing remarks also overcome the rejection of similar Claim 13.

## **II. REJECTION UNDER 35 U.S.C. § 103**

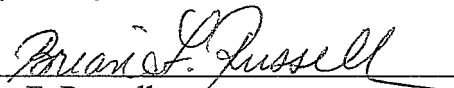
In paragraph 4 of the present Office Action, Claims 10, 17 and 20 are rejected under 35 U.S.C. § 103(a) as unpatentable over *Black* in view of U.S. Publication No. 2003/0072388 to *Francos et al. (Francos)*. This rejection is overcome for at least the remarks set forth above with reference to the rejection of underlying independent Claims 1, 11 and 18.

## **III. CONCLUSION**

Having now addressed and overcome each outstanding rejection of the claims, Applicant respectfully submits that all claims now pending are in condition for allowance and respectfully requests such allowance.

Please charge any fee necessary to further the prosecution of this application to **IBM Corporation Deposit Account No. 09-0447**.

Respectfully submitted,



Brian F. Russell

Reg. No. 40,796

DILLON & YUDELL LLP

8911 N. Capital of Texas Hwy., Ste. 2110

Austin, Texas 78759

(512) 343-6116

ATTORNEY FOR APPLICANT(S)